



Standard Update

Better Data Through Standards



Vol. 1, No. 2, Summer 1999

The Standard Update, EPA's newsletter about data standards, contains information you can read and reuse whatever your interest in information management may be. For more information on any newsletter topic, see the Environmental Data Registry (EDR) Website at <http://www.epa.gov/edr/>. The EDR Website will also be your source for Standard Update back issues and a vehicle for reader comments.

EPA's Data Standards Process—All Aboard

Before the U.S. had a standard railroad track gauge, there were many problems. Passengers and freight had to be unloaded and transferred every time a train reached the end of one company's system so that they could continue the trip on another railroad with a different sized track. In 1862, however, President Abraham Lincoln signed the Pacific Railway Act, which authorized the construction of a transcontinental railway and telegraph line. The construction of the transcontinental railway spurred the nation's railroads to cooperatively set a U.S. standard gauge railroad track at 4 feet 8.5 inches. The common goal of efficient transportation brought together railway management, engineers, train manufacturers, and passengers. The standard gauge track saved time and labor costs.

The process EPA uses to establish data standards is a similar collaborative, consensus-based approach. For railways, collaborating on track gauge standardization made transporting goods more affordable and more convenient; for EPA and our

partners, consensus and commitment to data standardization maximizes data sharing opportunities, reduces redundant data element development, and encourages mutual participation. Success means streamlined implementation of the standard setting process and target data standards—recent standards have been promulgated in as few as five months. Also, Agency personnel are key players in the standard setting activities of federal, national, and international organizations, including the Federal Geographic Data Committee (FGDC), the American National Standards Institute (ANSI), and the International Organization for Standardization (ISO). This level of participation among standards organizations contributes significantly to the adoption of existing standards.

The Agency's process, consisting of four phases: candidate, interim, final, and review, rolls steadily toward better data management. Generally, an Agency data standard consists of two parts—the data elements of the standard and the business rules describing the standard's implementation. The following high-level description briefly summarizes the



data standards process (see the EDR Website, <http://www.epa.gov/edr/>, for a more detailed description of the data standard process).

Candidate Phase

The collaborative process begins with the candidate phase where interested parties identify the necessity and usefulness of a particular standard, and may research existing standards for reuse. Data standard proposals are welcomed from EPA program offices, states, or individuals. To keep the train on track and give it direction, EPA's senior management arranges priorities on a yearly basis.

Interim Phase

The interim phase is a ratification process. There are questions about who or what organization is going to manage the set of data resources, and what data elements will be used to represent the standard. A work group of interested parties and subject matter experts meet to establish consensus on the standard's content. The group then submits their findings for approval. If the interim standard is approved, it is published on the EDR Website.

The ability to ensure an open, consultative process that encourages full participation of all interested parties is key to success.

Final Phase

In the final phase, the work group develops the business rules that identify roles and responsibilities, scheduling, and procedures for implementing the standard. They review comments on the interim standard, resolve issues, reach consensus among the

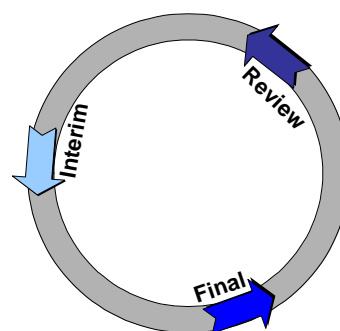
stakeholders, and modify the standard accordingly. The final approved standard is then published on the EDR Website.

Review Phase

Data standards are periodically reviewed to ensure their continued utility and accuracy. A request for data standard review may be initiated by an interested stakeholder at any time, thus ensuring that Agency partners' needs are met.

Data Standards Are Never Finished

To maintain currency, data standards are periodically reviewed to ensure their



usefulness and applicability. An interested stakeholder may request a data standard review whenever one is needed—essentially data standards are dynamic. Changes in available

technology, Agency priorities, and data requirements all impact the data standards process. The train of standardization is managed so that it stays on track.

To discover more about the EPA's data standards setting process, visit the EDR Website at <http://www.epa.gov/edr/>.

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